

LIPINSKI, J.S.

On periodic extensions of functions. Bul to Pol math 12
no.7:373-375 '64.

1. Department of Mathematics of the University, Lodz.
Presented by E. Marczewski.

CHMIELIKOWSKI, Zbigniew; LIPINSKI, Jerzy; WADOLOWSKI, Wladyslaw

Plastic surgery in the 1st Surgical Clinic in Gdansk. Pol.
przepl. chir. 37 no. 12:1216-1219 D ' 65

1. Z I Kliniki Chirurgicznej AM w Gdansk (Kierownik: prof.
dr. H. Kania).

LIPINSKI, Jerzy; WADOLCOWSKI, Wladyslaw

Incarcerated femoral hernia of urinary bladder. Pol. przegl.
chir. 37 no. 12:1258-1259 D ' 65.

1. Z I Kliniki Chirurgicznej AM w Gdansk (Kierownik: pelniacy
obowiazki: doc. dr. W. Taubenfligel).

LIPINSKI, Jerzy

Penis plastic surgery with a free transplant. Pol. przegl.
chir. 37 no.12:1255-1257 D ' 65.

1. Z I Kliniki Chirurgicznej AM w Gdansk (Kierownik: prof.
dr. H. Kania [deceased]).

LIPINSKI, Kazimierz, mgr inz.

Equipment for H 1 carrier telephone. Przegl kolej elektrotech 15
no.1:18-20 Ja '63.

LIPINSKI, Kazimierz, mgr inż.

Use of negative impedance repeaters in the telephone network of the Polish State Railroads. Przegl kolej elektrotech 11 [1.6. 16] no.2:50-55 F '64.

1. Gdansk District Administration of the State Railroads.

P/014/61/040/008/004/008
D233/D305

AUTHORS: Akerman, Karol, Kozak, Zdzisław, and Lipiński,
Krzysztof

TITLE: Separating germanium from carborundum in heavy liquids

PERIODICAL: Przemysł chemiczny, v. 40, no. 8, 1961, 447 - 448

TEXT: An attempt to separate germanium from the fine carborundum wastes resulting from cutting germanium monocrystals is described. Initial investigations were carried out at the Katedra zespolawa chemii fizycznej i technologii chemicznej uniwersytetu im. Marii Curie-Skłodowskiej, Lublin (Joint Departments of Physical Chemistry and Chemical Technology of the University im. Maria Curie-Skłodowska, Lublin) and further work was conducted at the Laboratorium badawcze siarki i surowców chemicznych (Sulphur and Chemical raw Materials Research Laboratory), in Warsaw. Separation may be attained on the basis of different specific gravities of the 2 components, in heavy liquids which (a) have a specific gravity in-

Card 1/3

Separating germanium from ...

P/014/61/040/008/004/008
D233/D305

intermediate between Ge and carborundum; (b) are mobile and (c) are inert towards G_e . These conditions are best fulfilled by CH_2I_2 . In early experiments the wastes were passed through a 0.067 mm mesh and the coarse fraction was broken up and received larger pieces of G_e were extracted manually. The fine fraction (3-6 g) was then mixed with CH_2I_2 (~25 g) and the suspension was centrifuged at 3500 revs/min for 15 minutes, after removing all air bubbles and ensuring complete wetting. The light fraction was then decanted into a Schott crucible, filtered and the filtrate was recentrifuged after remixing with the heavier material. A total of 3 such extractions was considered sufficient and the separated material was washed with chloroform. To assess the consumption of CH_2I_2 , the separations were repeated, using 40 g of the wastes, finding that 19.0 ml of CH_2I_2 could not be recovered out of the original 60 ml. Identical results were obtained with initial volumes of 58 and

Card 2/3

Separating germanium from ...

P/014/61/040/008/004/008
D233/D305

6l ml CH_2I_2 . A more accurate series of experiments, involving the separation of a total of 500 g of waste, gave the mean consumption of CH_2I_2 . Pre-wetting the powder with benzene and separations of Ge from carborundum in molten NaCl or $\text{Na}_2\text{B}_4\text{O}_7$ and by flotation have proved unsuccessful. There are 2 tables.

ASSOCIATION: Instytut badań jądrowych, Warszawa (Nuclear Research Institute, Warsaw)

SUBMITTED: March 21, 1961

Card 3/3

LIPINSKI, Krzysztof; AKERMAN, Karol; KOZAK, Zdzisław

Separation of Germanium from Carborundum in a heavy liquid. Przem
chem 40 no.8:447-448 Ag '61.

1. Instytut Badan Jadrowych, Warszawa

LIPINSKI, K.

LIPINSKI, K. Calculation of the elements of an amplifier. p. 71

Vol. 8, no. 3, Mar. 1956
PRZEGLAD KOLEJOWY ELEKTROTECHNICZNY
TECHNOLOGY
Warszawa, Poland

So: East European Accession Vol. 6, no. 2, 1957

LIPINSKI, K.

LIPINSKI, K. Calculation of the elements of an amplifier. p. 115

Vol. 8, no. 4, Apr 1956
PRZEGŁAD KOLEJNY ELEKTROTECHNICZNY
TECHNOLOGY
Warszawa, Poland

So: East European Accession Vol.6, no. 2, 1957

LIPINSKI, K.

Grounding of railroad appliances for the safety of traffic and communication.
p. 82.

PRZEGLAD KOLEJOWY ELEKTROTECHNICZNY. (Wydawnictwa Komunikacyjne) Warszawa,
Poland, Vol. 11, No. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.
Uncla.

LIPINSKI, K., mgr., inz.

Replacement of original microphone insets in Western Electric
selectors by insets of Polich production. Przegl kolej elektrotechn
13 no.11:348-349 '61.

LIPINSKI, Kazimierz, mgr inż.

Regeneration of the installation fuses for railroad traffic safety. Przegl kolej elektrotech 14 no.8:247-248 Ag '62.

1. Dyrekcja Okręgowa Kolei Państwowych, Gdansk.

LIPINSKA, K.

35

POLAND

KULESZA, Aleksandra; Department of Epidemiology (Zaklad Epidemiologii), PZH (Panstwowy Zaklad Higieny -- State Institute of Hygiene), Director: Prof Dr J. KOSTRZEWSKI, Head of the Institute: Prof Dr S. PRZESMYCKI; with the collaboration of J. GOLBA, T. JOPKIEWICZ, M. ZACPRZAK, W. KOCIELSKA, M. KOPEC, K. LIPINSKA, R. LUTYNSKI, J. MAKAREWICZ, H. MALYSZKO, K. NEYMAN, A. OLES, S. PESKA, K. POPIELEWICZ, T. RODKIEWICZ, J. ROZWADOWNA, W. SOCZEWICA, S. SZCZESNIAK, P. ZOLNIE-RZOWA all of the Wojewodztwo Health and Epidemiological Stations (Wojewodzkie Stacje Sanitarno-Epidemiologiczne); H. BOBROWSKI, A. GECOW, J. GELBER, M. GRUSZCZYNSKA, H. JASTRZEBSKA, E. JUZWA, J. KUROCZKIN, Z. RESZKE, R. STANCZYK, J. SYG-NATOWICZOWA, Z. SZCZERSKA, K. SZCZYGIELSKI, S. SZYNDLAR, X. SWICOWA, J. WAYSZCZUK, R. WARZECHA all of the Departments of Poliomyelitis Patients (Oddzialy dla Chorych na Polio-myelitis) of the Wojewodztwo Health and Epidemiological Stations; J. ADAMSKI (Poznan), H. DOBROWOLSKA (Warsaw), J. BOCHENSKA (Lodz), M. KOENIG (Krakow); H. DOBROWOLSKA of the Department of Virology (Zaklad Wirusologii) of PZH,

1/2

POLAND

Director: Prof Dr F. PRZESMYCKI, technical aid: A. BACINSKA

"Epidemic Situation of Poliomyelitis in Poland in 1961"

Warsaw, Przegląd Epidemiologiczny, Vol XVI, No 4, 1962,
pp369-375.

Abstract: /Author: English summary modified/ The profound influence on the epidemiology, etiology and clinical picture of poliomyelitis of the introduction of mass immunization with attenuated polio vaccines in 1959 is discussed. Observations on the influence and effect of immunizations with such vaccines on the epidemic situation of poliomyelitis in Poland are reported. 4 tables, 2 diagrams; 5 Polish references.

12/2

LIPINSKA, K.

30

POLAND

KULESZA, Aleksandra of the Department of Epidemiology (Zaklad Epidemiologiczny) of the PZH (Panstwowy Zaklad Higieny) -- State Institute of Hygiene, Director: Prof Dr F. PRZESMYCKI, Head of the Department: J. KOSTRZEWSKI, J. GOLEMA, T. JOPKIEWICZ, M. KACPRZAK, W. KOSIELSKA, K. LIPINSKA, R. LUTYNSKI, J. MAKAREWICZ, S. PERKA, T. ROKIEWICZ, W. SOCZEWICA, S. SZCZESNIAK, D. ZOLNIERKOWA all of the MSSE (Wojewodzkie Stacje Sanitarne-Epidemiologiczne -- Wojewodzkie Health and Epidemiology Stations); H. BOBRONSKI, A. GECOW, J. GELBER, E. JUZWA, J. KUROCZKIN, J. SYGNATOWICZOWA, Z. SZCZERSKA, K. SZCZYGLIELSKI, K. SWICOWA, R. WARMONIA of the Departments of Poliomyelitis Patients (Oddzialy dla Chorych na Poliomyelitiz) of the MSSE; H. DOBRNOWOLSKA of the Department of Virology (Zaklad Virusologii) of PZH, Director: Prof Dr F. PRZESMYCKI; J. ADAMSKI (Poznan), H. DOBRNOWOLSKA (Warsaw), J. BOCHNERSKA (Lodz), M. KOENIG (Krakow), H. MAKOWER (Wroclaw), F.Z. TAYTSCH (Warsaw) of the PZH; technical aid of A. BAGINEKA of the PZH.

"Safety of Immunization with the Attenuated Polio Virus

1/2

POLAND

Strains Type 1 Chat and Type 3 W Fox''

Warsaw, Przegląd Epidemiologiczny, Vol XVI, No 4, 62, pp 377-388.

Abstract: [Author's English summary modified] An epidemical, clinical and virological analysis of poliomyelitis in Poland was made within 6 weeks after completion of oral immunization with polio virus type 1 Chat and type 3 W Fox. Investigations made in 1950 and 1960 show the complete safety of Koprowski's attenuated oral vaccine type 1 Chat. The strain 3 W Fox is indicated as a pathogenic one and its uncertain safety found by investigations in 1960 has been confirmed. 8 tables; 2 diagrams; 9 references, 2 Polish the rest Western.

12/2

LIPINSKI, Krzysztof

Certain parameters in the BaSO_4 to Ba_3 reduction process in the light of data to be found in pertinent literature. Chemik 18 no.1:23-25 Ja '65.

1. Central Laboratory of Mineral Raw Materials for Chemistry, Warsaw.

LIPINSKI, LUDWIK

Category: Poland/Analytical Chemistry - Analysis of inorganic substances.

G-2

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 31018

Author : Lipinski Ludwik

Inst : not given

Title : Rapid Method for the Determination of Carbon Monoxide in Air

Orig Pub: Gospod. węglem, 1956, 5, No 4, 79-84

Abstract: For the determination of CO in the atmosphere a rapid method is proposed which is based on the use of GIG indicator tubes, in which CO reacts with I_2O_5 to liberate I_2 . Content of CO is determined from the intensity of the yellow coloration of the I_2 . For a quantitative evaluation a set of standards is used (0.01, 0.04, 0.10 and 0.50% CO). Air samples are collected with a suction pump.

Card : 1/1

-47-

LIPINSKI M

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000930020013-3"

"Pendulum." p. 20 (Horyzonty Techniki, Vol 6 No 1 Jan 53 Warszawa)

LIPINSKI, M.

Lipinski, M. The clothoid as an element of curvilinear alignment. p. 121.

GEODEZJA I KARTOGRAFIA

Vol. 5, No. 2, 1956

Warszawa, Poland

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 5, No. 10 Oct. 56

LIPINSKI, M.

Demarcation and calculation of a clotoide, p. 20.
Vol 12, no. 1, Jan. 1956. PRZEGŁAD GEODEZYJNY, Warsaw, Poland.

So: Eastern European Accession. Vol 5, no. 4, April 1956

LIPINSKI, M.

POLAND / Farm Animals. Honey Bee.

Q

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40553.

Author : ~~Lipinski Mieczyslaw.~~

Inst : Not given.

Title : On the Secretion of Nectar in Robinia Pseudacacia.

Orig Pub: Pszczelarstwo, 1957, 8, No 5, 136-137.

Abstract: The description of the process of secretion of nectar, with detailed illustrations of the parts of the blossom, is given.

Card 1/1

POLAND

PEZACKI, Wincenty, DUDA, Zbigniew, LIPINSKI, Marian, and BARTOZAK, Jozef of the Chair of Meat Technology (Katedra Technologii Miesal), the WSR [Wyzsza Szkola Rolnicza, Higher School of Agriculture] in Poznan (Director: Prof. Dr. Wincenty PEZACKI).

"Free Aminoacids of Raw Pork Meat Articles."

Warsaw-Lublin, Medycyna Weterynaryjna. Vol 18, No 9, Sep 62, pp 516-523.

Abstract: [Authors' English summary modified] Determinations, by the unidirectional paper chromatography method, were made for 15 free amino acids on raw pork meat articles under conditions of storage and production. Materials and procedure is described and the resulting graphs are shown. Results are discussed, with their significance for the storing and production of the articles. Of the 20 references, three are Western, two are German, and the rest are Soviet-bloc (11 from Poland).

1/1

LIPINSKI, MIECZYSLAW.

Posytki pszczele; zapylanie i miododajnosć roslin. (Wyd. 1) Warszawa, Panstwowe Wydawn.
Rolnicze i Lesne, 1958. 328p Poland/

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

LIPINSKI, Mieczysław

Newest geodetical publications. Przegl geod 33 no.11:436-438 '61.

1. Redaktor Panstwowego Przedsiębiorstwa Wydawnictw Kartograficznych.

LIPINSKI, S.

"The resistance of potatoes to *Phytophthora infestans*" p.36 (POSTĘPY WIEDZY ROŚNICOZEJ
Vol. 5, no.1, Jan/Feb 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, Vol. 2, #2, Library of Congress
August, 1953, Uncl.

POLAND/Cultivated Plants. Potatoes, Vegetables, Melons.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77667.

Author : Lipinski, Stanislaw.

Inst :

Title : Complex Resistance Cultivation of Potatoes.

Orig Pub: Roczn. nauk rolniczych, 1956, A74, No 1,56-64.

Abstract: Description of methods of selection according to breeding of varieties which are resistant to viruses and fungoids, as well as against infections of the Colorado Potato Bug.

Card : 1/1

I 61570-65

ACCESSION NR: AP5013218

PO/0056/65/016/002/0227/0234

AUTHOR: Kulesza, R. (Kulesha, R.); Lipinski, S. (Lipin'ski, S.)

16
B

TITLE: Effect of the vegetative nervous system on the intestines of dogs after irradiation

SOURCE: Acta physiologica polonica, v. 16, no. 2, 1965, 227-234

TOPIC TAGS: radiological dosage, irradiation, irradiation effect, dosage, small intestine, sympathetic system impairment, neurohormone, histamine, Magnus method, serotonin, adrenaline, noradrenaline, poison, pendiomid, regitine, atropine, dog irradiation, postradiation, vegetative nervous system, laboratory animal

ABSTRACT: The sensitivity of the small intestine of dogs to neurohormones during acute postradiation sickness has been studied. A total dose of 600 r of whole-body x-radiation was delivered to dogs of both sexes weighing 8-22 kg. Two-centimeter specimens of the small intestine, obtained on the seventh day after irradiation, were examined by the Magnus method. The effect of acetylcholine, histamine, serotonin, adrenaline, and noradrenaline on the nature of contractions of irradiated and nonirradiated dog intestine was investigated. The effect of these neurohormones on the intestine of dogs after poisoning with pendiomid, regitine, and atropine was also investigated. The experimental results show that: 1) the motor

Card 1/2

L 61570-65

ACCESSION NR: AP5013218

0

function control of the intestine by the vegetative nervous system is impaired during acute postradiation sickness; 2) in the main the sympathetic system of irradiated dogs is impaired; and 3) the direct action of the neurohormones on the intestinal muscularis remains intact during postradiation sickness. Orig. art. has: 6 figures.

ASSOCIATION: Ośrodek Ochrony Radiologicznej i Radiobiologii (Center for Radiological Protection and Radiobiology)

SUBMITTED: 08Sep64

ENCL: 00

SUB CODE: LS

NO REF SOV: 007

OTHER: 006

Card 2/2 *MP*

L 1684-66 EWT(m)

ACCESSION NR: AP5009678

PO/0056/65/016/001/0009/0017

AUTHOR: Kulesza, Romuald⁵⁵ (Kulesha, R.); Lipinski, Stanislaw⁶⁵ (Lipin'ski, S.)

TITLE: Study of the primary symptoms of postradiation disease⁵⁵

SOURCE: Acta physiologica polonica, v. 16, no. 1, 1965, 9-17

TOPIC TAGS: irradiation, radiation sickness, radiation biologic effect, vomit

ABSTRACT: This study is concerned with one of the main primary symptoms of post-radiation disease, namely the vomiting reflex. The experiments were carried out on dogs of both sexes weighing 7-22 kg, which were subjected to whole-body irradiation with X-rays (dose 12 r/min, total dose on the body 600 r, 20 mA, 180 kV, 0.5 mm Cu filter). The dogs were irradiated on an empty stomach. Duration and frequency of vomiting reflexes were studied in the experimental animals. With the purpose of elucidating the mechanism of the vomiting reflex after irradiation, pharmacologic agents with various points of action, i.e., in the central nervous system or in the vegetative nerve endings, were administered. The drugs studied included phenactil (largactyl), aviomarine, atarax, atrophine, spasmophen and regitine. Drugs acting on the central nervous system, such as phenactil, aviomarine and atarax, decreased

Card 1/2

LIPINSKI, S. Cand Med Sci -- (diss) "Experimental studies of the toxicity of industrial aerosols of amorphous selenium and selenious anhydride." Mos, 1959. 12 pp (First Mos Order of Lenin Med Inst im I. M. Sechenov), 270 copies (KL, 52-59, 126)

-132-

ZIEMLAŃSKI, Sławosław; LIPINSKI, Stanisław

Experimental studies on the penetration of I-131-labelled albumin from the blood into the lumen of the small intestine. Acta physiol. polon. 13 no.6:773-781 '62.

1. Z Zakładu Patologii Ogólnej i Dosw. AM w Warszawie Kierownik: prof. dr J. Walawski Z Ośrodka Ochrony Radiologicznej i Radiobiologii MON w Warszawie.

(ALBUMIN) (LEUKOCYTES) (INTESTINE SMALL)
(INTESTINAL SECRETIONS)

LIPINSKI, Stanislaw; TOTH, Zbigniew

Universal device for clinical isotope research. Pol. przegl.
radiol. 28 no.6:603-605 N-D'64.

1. Z Osrodka Ochrony Radiologicznej i Radiobiologii w
Warszawie (Kierownik: dr. T.Obara.

KULESZA, Romuald; LIPINSKI, Stanislaw

Studies of the primary symptoms of radiation injury. Acta physiol.
Pol. 16 no.1:9-17 Ja-F'65.

1. Odrodek Ochrony Radiologicznej i Radiobiologii w Warszawie
(Kierownik: dr. T. Obara; Kierownik naukowy: doc. dr. J. Ryzewski).

KULESZA, Romuald; LIPINSKI, Stanislaw

The influence of the autonomic nervous system on the motor function of the intestines of the dog after irradiation. Acta physiol. Pol. 16 no.2:227-234 Mr-Apr'65.

1. Ośrodek Ochrony Radiologicznej i Radiobiologii (Kierownik: Dr. T. Obara; Kierownik naukowy: doc. dr. J. Ryzewski).

LIPINSKI, W.

Studies on recurrent fever. Polski tygod.lek. 5 no.42:1465-1466
16 Oct 50. (CML 20:5)

LIPINSKI, Wladyslaw (Lublin, ul. Sklodowskiej 5 m. 1.)

Review of fracture patients operated on with wires used for fixation of the bone fragments. Chir. narz. ruchu 13 no.2:113-117 1958.

1. Z Kliniki Ortopedycznej A. M. w Lublinie Kierownik: doc. dr St. Piatkowski.

(FRACTURES, surgery

fixation of fragments with wires, results (Pol))

LIPINSKI, Wladyslaw (Lublin, ul. Sklodowskiej 5 m. 1.)

~~A rare case of migration of a Kuntscher nail with spontaneous eruption~~
through the knee joint. Chir. narz. ruchu 13 no.2:119-120 1958.

1. Z Kliniki Ortopedycznej A. M. w Lublinie Kierownik: doc. dr
St. Piatkowski.

(FEMUR, fractures

fixation with Kuntscher nail, subsequent migration of nail
& eruption through knee joint (Pol))

LIPINSKI, Wladyslaw (Lublin, ul. Sklodowskiej 5 m. 1.)

Extensive osteolysis of the forearm in syringomyelia. Chir. narz. ruchn
23 no.4:375-377 1958.

1. Z Kliniki Ortopedycznej A. M. w Lublinie Kierownik: doc. dr St. Piat-
kowski. Adres autora: Lublin, ul. Sklodowskiej 5 m. 1.

(TUBERCULOSIS, OSTEOARTICULAR, complications,

wrist osteolysis in syringomyelia (Pol))

(SYRINGOMYELIA, compl.

tuberc. osteolysis of wrist (Pol))

P/039/60/000/010/004/004
A224/A026

AUTHORS: Lipiński, Wiesław; Lasota, Julian, Masters of Engineering

TITLE: The Application of Protective Atmosphere in Cold-Rolled Strip Annealing

PERIODICAL: Hutnik, 1960, No. 10, pp. 386 - 388

TEXT: The paper gives a short description and operational data of a gas generator supplying protective atmosphere to the cold-rolled strip annealing furnaces in the Huta "Baildon" ("Baildon" Metallurgical Plant). The protective gas generator was supplied by the foreign firm "Gautschi Electro Fours" and installed in the "Baildon" Metallurgical Plant in 1958. Based on the operational data collected, the authors conclude that the application of a protective atmosphere in annealing cold-rolled strips brings forth great economical benefits. The capital investment is not very high and the operational costs of the protective-gas generator are very low. They recommend the application of the protective atmosphere in the entire metallurgical and machine-building industry to improve the products. There are 1 photograph, 1 figure, 1 table, and 1 Soviet reference. ✓

ASSOCIATION: Huta "Baildon" - Katowice ("Baildon" Metallurgical Plant imeni Katowice)

Card 1/1

LIPINSKI, Z.

General yearly harmonogram of an operational unit in building. p. 163.
(PRZEGLED SUDOWNIENI, Vol. 26, No. 6, June 1954, Warszawa, Poland)

30: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec.
1954, Uncl.

KONKOL, Janina; KURZYNA, Krystyna; LIPINSKI, Zdzislaw; MASIOWSKI, Romuald;
STANKIEWICZ, Helena

Juvenile goiter among high school students in Bialystok. Zdrow.
publiczne 7/8:279-282 J1-Ag '65.

1. Studenckie Kolo Naukowe przy II Klinice Chorob Wewnetrznych
AM w Bialymstoku (Kierownik: prof. dr. J. Chlebowski).

✓ An Investigation of Properties of Individual Components of Molten Slag Using Electromotive Force Measurements. D. A. Lash and B. M. Lipnitskii. *U.S.S.R. Acad. Sci. Ser. Chem. Sci. Div. 1974* (2) 40-46. In Russian. Electromotive force (without transfer) made of slags containing various oxides of CaO , MgO , Al_2O_3 , and SiO_2 were measured. On the basis of the results obtained, the character of changes of potential of the slag as measurements on dilution were carried out. Analytical character of aluminum was demonstrated and the presence of the solid slag of anions of compounds Ca_2SiO_4 , CaSiO_3 , Al_2SiO_5 , and $\text{Ca}_2\text{Si}_2\text{O}_7$ was confirmed. On the example of the investigation of the slag, the possibility of using the method for the control of the composition of the slag in steel making furnaces was shown.

11/2/86

5.3610

75675
SOV/80-32-10-24/51

AUTHORS: Davankov, A. B., Oratynskaya, A. N., Laufer, V. M.,
Lipinskiy, A. G.

TITLE: Deionization of Acid Albumin Hydrolysates by Anion-
Exchange Resins

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 10, pp
2269-2275 (USSR)

ABSTRACT: Various domestic ion-exchange resins were tested for
the separation of amino acids from the mineral acids
residue in casein hydrolyzates. Slightly basic MMG-1
and AN-2F, medium basic N-O and EDE-10P, and strongly
basic AV-16 anion-exchange resins were investigated.
EDE-10P and AN-2F resins gave the best results; the
adsorption of Cl^- and SO_4^{--} was complete, and that of
amine nitrogen insignificant. The degree of deioniza-
tion can be quickly determined by the pH value of the
filtrate. When $\text{pH} < 5.5$, the deionization is practi-
cally 100%; at $\text{pH} = 5.5$ to 3.5, the Cl^- content is

Card 1/2

Deionization of Acid Albumin Hydrolysates by
Anion-Exchange Resins

75675
SOV/80-32-10-24/51

below 0.2%; pH < 3 shows a low degree of demineralization of the hydrolyzate. The laboratory tests were repeated with practically identical results in a pilot installation with stainless steel filtering column of 5-kg ion-exchange resin capacity. There are 5 tables; 1 figure; and 5 Soviet references.

SUBMITTED: July 21, 1958

Card 2/2

LIPINSKIY, B.; SVIDERSKIY, S.

Automatic line for machining cylinder blocks. Trudy Stud.
nauch. ob-va LIEI no.3:97-101 '59. (MIRA 16:10)

VALEYEV, A.M.; GOLEV, Yu.D.; GOLEVA, Z.N. ; GOLOVKO, R.Ye.; ZAV'YALOVA, B.A.;
ZARETSKIY, B.A.; ZVEREV, Ye.A.; LIPINSKIY, F.A.; MANGUSHEV, I.Kh.;
MEYZLER, M.Kh.; MUTOVKIN, V.A.; RUDAKOV, Ya.D.; RUKOVANOV, B.P.;
KHASANOV, G.M.; ESTRIN, Z.I.; ZUDIN, B.A., red.; BORUNOV, N.I., tekhn. red.

[Adjustment and operation of equipment in the Novo-Ufimskii Heat and
Electric Power Plant] Naladka i eksploatatsiia oborudovaniia na Novo-
Ufimskoi TETs. Moskva, Gos. energ. izd-vo, 1961. 175 p. (MIRA 14:9)
(Bashkiria—Electric power plants)
(Bashkiria—Heating from central stations)

LIPINSKIY, F.A., inzh.

Redesigning of the collar of the hydraulic seal of the VR-25-2
turbine. Elek.sta. 32 no.6:79 Je '61. (MIRA 14:8)
(Turbines)

GORBANENKO, A.D., kand. tekhn. nauk; TSIRUL'NIKOV, L.M., inzh.;
KRASNOSELOV, G.K., inzh.; GELLER, Z.I., doktor tekhn. nauk;
LIPINSKIY, F.A., inzh.

Effectiveness of burning mazut. Elek. stat. 35 no.1:66-71
Ja '64. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy teplotekhnicheskiy
institut im Dzerzhinskogo (for Gorbanenko, TSirul'nikov).
2. Bashkirenergo (for Krasnoselov). 3. Groznenskiy neftyanoy
institut (for Geller). 4. Novoufimskaya teploelektrotsentral'
(for Lipinskiy).

E 56515-65 EWT(1)/EWA(h) Feb

ACCESSION NR: AP5016721

UR/0286/65/000/010/0040/0040

AUTHORS: Lipinskiy, G. V.; Notkin, L. R.; Glushko, E. N.; Grabar', K. V.TITLE: Rectangular pulse generator. Class 21, No. 171020SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 40

TOPIC TAGS: pulse generator

ABSTRACT: This Author Certificate presents a rectangular pulse generator containing a double branch trigger. A sawtooth voltage generator and a circuit for comparing the sawtooth voltage with a reference, connected to one of the inputs of the trigger, are connected in series to the output of one of the branches (see Fig. 1 on the Enclosure). To insure the constancy of the pulse off-duty factor with changes in pulse width, a sawtooth voltage generator and a comparison circuit connected to the other trigger input are connected in series to the output of the second branch. The same reference voltage is supplied to both comparison circuits. Orig. art. has: 1 diagram.

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po radioelektronike SSSR
(Organization of the State Committee for Radio Electronics, SSSR)

Card 1/3

L 6535-65

ACCESSION NR: AP5016721

SUBMITTED: 17Jul64

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/3

BAKINOVSKIY, V.L., kand.tekhn.nauk; LIPINSKIY, G.V., inzh.; OSADCHIY, A.P.;
inzh.; FRIDMAN, Ye.Ya., inzh.

IKL-5 universal pulse device for measuring the distance to
damages in overhead and cable lines for electric transmission
and communications. Trudy VNIIE no.8:35-43 '59. (MIRA 13:9)
(Electric lines--Testing)

LIPINSKIY, L.

Subject : USSR/Aeronautics AID - P-147
Card : 1/1
Author : Lipinskiy, L.
Title : Increasing Power of Aviation Compression Serial Engines
Periodical : Kryl. Rod., 1, 17 - 19, Ja 54
Abstract : This article explains means to increase the power of
two competition model plane engines, the TsAML-50 and
the K-16. Diagrams.
Institution : None
Submitted : No date

LIPINSKY, Petr Ignat'yevich; STRILEVA, G.F., red.; PECHERSKAYA, T.I.,
tekhn. red.

[Chemistry in the service of stockbreeding] Khimiiu na sluzhbu
zhivotnovodstvu. Irkutsk, Irkutskoe knizhnoe izd-vo, 1959. 28 p.,
(MIRA 15:2)

(Agricultural chemistry)

23

Co

Use of ammonium sulfate baths in viscose spinning.
 S. P. Lipinski. *Ishkusennoe Volokno (Artificial Fiber)*
 S. No. 8, 10-20 (1944).—By substituting a mixt. of 130 g/l.
 g/l. H_2SO_4 , 230-5 g/l. Na_2SO_4 , 15 g/l. $ZnSO_4$ and 70 g/l.
 (NH₄)₂SO₄ for glucose in spinning of viscose, an equally
 good product was obtained. This rayon gives relatively
 somewhat darker shades in dyeing than the product spun
 in glucose bath. Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

23

- The production of cinematographic viscose films. G. Rzyer and S. Lipinski. *Org. Chem. Ind. (U. S. S. R.)*, 487 (1968). The production of viscose film by the method of Collophane mantel and its use as a substitute for cellulose-acetate cinematographic films are discussed from tech. and economical viewpoints. Chas. Rhyne

KURIL'CHIKOV, Ye.A.; TENENBAUM, A.L.; LIPINSKIY, S.P.; LAVROVA, I.N.

Spinning of staple fiber without guide-pulley. Khim.volok.
no.5:38-41 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna (VNIIV).
(Rayon spinning)

KULIKOVA, T.M.; TALAYEVA, G.V.; LIPINSKIY, S.P.

Galette disk pins made of high-alumina ceramics. Khim. volok.
no.5:67-68 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

LIPINSKIY, S.P.; SAKHAROV, I.P.; EYFER, I.Z.

Formation of viscose fiber with a variable rate for winding into large
packages. Khim. volok. no.3:32-34 '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

LIPINSKIY, Yan

Convergence to infinity of a sequence of continuous functions.
Dokl. AN SSSR 140 no.4:752-754 0 '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom P.S.Aleksandrovym.
(Functions, Continuous)

LIPINSKIY, Yu.D.

The Rublev Water-Supply Station is an enterprise of communist labor. Gor.khoz,Mosk. 36 no.8:17-19 Ag '62. (MIRA 16:1)

1. Instruktor Otdela gorodskogo khozyaystva Moskovskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.
(Moscow--Water supply)

LIPIS, B.V.

USSR/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6480

Author: Bartenev, Ye. N., Lipis, B. V.

Institution: None

Title: General Purpose Apparatus for the Recovery of Alcohol from Waste

Original

Publication: Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1955, No 6, 56-58

Abstract: Description of a system for continuous recovery of alcohol, from vinicultural waste, by means of a special apparatus which consists, essentially, of evaporation column, spirit column, rectification column, and ancillary equipment. The original part is the evaporation column, consisting of a cylindrical steel casing with a conical bottom part. A device is provided which ensures continuous feed of marc into the casing of the apparatus and the flow of marc into the conical portion of the column, where leaching of tartrate compounds from the alcohol free marc is effected. The spent marc is discharged

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6480

Abstract: by a screw conveyer and is pressed into briquettes. Vinasse is automatically drawn off through a hydraulic seal and pumped to tartrate compounds recovery. Alcohol vapors pass from the evaporation column into the spirit column and are processed further in the conventional manner. On recovering alcohol from yeast the latter is introduced directly into the spirit column, by-passing the evaporation column. The apparatus can also be utilized for the production of brandy alcohol. Daily output capacity: evaporation column -- 24 tons of marc; spirit and rectification columns -- 120 decaliters of technical 82-88% alcohol. Steam expenditure for the recovery of alcohol from 100 kg of marc is of 40 kg. Power consumption is of 1 kilowatt.

Card 2/2

LIPIS, B.V.

✓ Oxygen regime and the oxidation-reduction potential of Moldavian wines during an accelerated processing of the wines. B. V. Lips (Inst. Fruit Growing and Viniculture, Acad. Sci. U.S.S.R., Moldavia Branch). *Sadovodstvo, Vinogradarstvo i Vinodelie Moldavii* 10, No. 4, 40-3 (1955).—Organoleptic properties of wine depend to a big extent on the oxidation-reduction potential (E_H) and the O content during alc. fermentation, aging, and bottling of the wine. (a) O-regime and E_H during the fermentation: E_H of the Moldavian musts is 300-300 mv.; during sulfitation it decreases about 15 mv. and then increases during the must decantation (+15-30 mv.) and the addn. of alc. (+15 mv.); when yeasts are added E_H decreases again (-30-70 mv.), growth of the yeasts causes an addnl. decrease of -25-80 mv., and the decrease of sp. gr. of 0.005 during the first 20 hrs. of the alc. fermentation causes a further decrease about 80 mv. When the fermentation proceeds at a const. temp. E_H coincides with the maximal decrease of the sugar content of the musts; a secondary min. of the E_H coincides with the time of finishing of the fermentation. During the first hrs. of the fermentation the O content of musts decreases from 3 to 1.5 mg./l.; later on, until the end of the

fermentation only traces of O are present in the fermenting must. By blowing air through the fermenting musts the amt. of O increases to 6 mg./l. during 5 min.; however, during the next 5 min. it is blown off entirely by the CO_2 produced. During the secondary fermentation E_H increases about 30-40 mv., and during the decantation (following the fermentation) the E_H reaches the value of 380-400 mv. (b) O-regime and E_H during accelerated technological treatments of wines: the accelerated technological processes used are characterized by the post-fermentation treatments of wine at the E_H of 300 mv., which is maintained by the satn. of the wines with O (6 mg./l.) and by an addn. of $K_2Fe(CN)_6$. A 60-day scheme is used for the treatment of white table wines and 35-day scheme for red wines. Nitrogenous, tannin, and coloring substances of white wines remained nearly unchanged after the treatment. The amt. of tartaric acid amts. of Fe and Cu increased. The amt. of tartaric acid slightly decreased. (c) O-regime and E_H during the aging and bottling of wines: the white wines obtained by the accelerated treatment used showed the E_H of 415 mv. which increased during filtration and decantation into the storage barrels to 450 mv. During these operations the O content increased from 1.3 to 7.1 mg./l. During the aging of the wines the E_H decreased to 200 mv. during the first 73 days and then to 170 mv. (characteristic E_H for the aged wines) during the next 43 days of storage. A rapid decrease of the E_H to the min. value occurs when the wines are stored at 20-5°. The O content of the wines transferred into the storage barrels can be decreased about 30% by blowing CO_2 through the barrel for 10 min. When the wines so treated were bottled into bottles contg. CO_2 no turbidity is formed during 20 days. For the manufg. of stable transparent wines the aged products are treated either by cold or warm temps. before bottling. E. Wierbicki

Lipis, B. V.

✓ Determination of the oxygen dissolved in wine by a polarographic method. B. V. Lipis. *Sudovodstvo, Vinogradarstvo* CH
Vinodelia Moldavia 10, No. 3, 55-9(1955).—The method involves the following calcn.: $O = p(a - e)/(b - e)$, where O = dissolved O in mg./l.; p = the max. amt. (mg./l.) of O which can be dissolved at a given temp. and atm. pressure (the O-absorption data are given for temps. ranging from zero (11.4 mg./l.) to 28° (6.6 mg./l.)); a = elec. current (ma.) in wine satd. with O; and e = residual current (after passing H₂ gas through the O-satd. wine for 15 min.).
 B. Wierbicki

LIPIS, B2 V.

Lipis, B. V.

"On regulating the accelerated processing of table wines in terms of the oxidation-reduction potential." Min Higher Education USSR. Krasnodar Inst of the Food Industry. Krasnodar, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

Knizhnaya letopis'
No. 25, 1956. Moscow

LIPIS, B.V., kand.tekhn.nauk, red.; FITOVA, L., red.; KAPITSA, V., tekhn.red.

[Brief technical manual on wine making] Kratkii tekhnicheskii
spravochnik vinodela. Kishinev, Gos.izd-vo "Karta Moldoveniiske."
1960. 547 p. (MIRA 14:1)
(Wine and wine making)

CHIKRYZOVA, Ye.G., red.; LYALIKOV, Yu.S., red.; LIPIS, B.V., red.;
DMITRENKO, N.Z., red.; SHCHETININA, Ye.A., red.; LEDVICH,
M.M., tekhn. red.

[Theory and practice of polarographic analysis] Teoriia i prak-
tika poliarograficheskogo analiza; materialy. Kishinev, Izd-
vo "Shtiintsa" Akad. nauk Moldavskoi SSR, 1962. 425 p.

(MIRA 15:12)

1. Vsesoyuznoye soveshchaniye po polyarograficheskoi analizu.
1st, 1959.

(Polarography—Congresses)

LIPIS, B.V.; MAMAKOVA, Z.A.

Photocolorimetric determining of higher alcohols in cognac distillates.
Trudy MNIIPS 2:31-36 '62. (MIRA 16'4)

(Colorimetry)

(Alcohols)

LIPIS, B.V.; MAMAKOV, A.A.; YEPIFANOV, P.V.; Prinimali uchastiye: SPEKTOR, L.A.;
LYALIKOVA, R.Yu.

Deaseration of grape juice. Trudy MNIIPP 2:81-86 '62. (MIRA 16:4)
(Grape juice)

LIPIS, B.V.; VASSERSHTEYN, Sh.Ye.

Determination of invert sugar in dry wines by the colorimetric method
using anthrone. Izv. AN Mold. SSh no.10:38-44 '62.

(MIRA 17:12)

LIPIS, B.V.; DUGAYEVA, L.I.; GRINBERG, N.Kh.

Polarographic method for determining colloids in grape and apple juice. Kons. i ov. prom. 18 no.8:38-41 Ag '63. (MIRA 16:8)

1. Moldavskiy nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.

(Fruit juices) (Colloids) (Polarography)

LIPIS, B.V.; TIMOFYEVA, O.A.; SHCHELOKOVA, I.M.

Objective methods for determining the coloring of tomato paste.
Kons. i ov.prom. 18 no.10:33-35 0 '63. (MIRA 16:12)

1. Moldavskiy nauchno-issledovatel'skiy institut pishchevoy pro-
myshlennosti.

LIPIS, B.V., kand.tekhn.nauk; MAMAKOVA, Z.A.; SOKOLOVA, A.F.

Application of gas-liquid chromatography for the identification
of higher alcohols and other volatile components of wine and
brandy products. Trudy MNIIPP 4:98-108 '64.

(MIRA 18:1)

LIPIS, B.V., kand.tekhn.nauk; LYALIKOVA, R.Yu.; CHERNICHUK, L.L.

Spectrophotometric method for determining tanning and coloring
substances in grape must and wine. Trudy MNTIPP 4:109-114 '64.
(MIRA 18:1)

LIPIS, B.V., kand.tekhn.nauk; LYALIKOVA, R.Yu.; DUGAYEVA, L.L.

High-frequency titration of wine and juices. Trudy MNIIPP 4:115-123
'64. (MIRA 18:1)

LIPIS, B.V.; DUGAYEVA, L.I.

Conductometric analysis of the dynamics of the separation of
tartaric acid compounds during juice processing. Trudy MNIIPP
5:74-79 '64.

(MIRA 19:1)

LIPIS, B.V.; DUGAYEVA, L.I.; LYALIKOVA, R.Yu.

Spectrophotometric method of determining the quality of
anticorrosive epoxy resin coatings on aluminum. Trudy MIIIPP
5:79-86 '64. (MIRA 1961)

USSR/Optics - Optical Methods of Analysis. Instruments, K-7

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35875

Author: Zaydel, A. N., Kaliteyevskiy, N. I., Lipis, L. V., Chayka, M. P.,
Belyayev, Yu. I.

Institution: Leningrad State University and Institute of Geochemistry and
Analytical Chemistry, Academy of Sciences USSR

Title: Spectral Analysis Using the Evaporation Method. I. Principle of
the Evaporation Method of Evaporating Admixtures in Vacuum and
Certain of Its Applications

Original
Periodical: Zh. analit. khimii, ¹⁹⁵⁶~~1955~~, 11, No 1, 21-29

Abstract: A new method was developed for spectroanalysis of low-volatility
compounds with small admixtures of volatile contaminations. The
analysis method is based on preliminary distillation of the admix-
tures from the sample and their condensation on the end surface of
a cooled copper or graphite electrode. The evaporation of the ad-
mixtures is performed in vacuum from a sample, placed inside a
graphite crucible, clamped between 2 graphite blocks and heated by

Card 1/2

USSR/Optics - Optical Methods of Analysis. Instruments, K-7

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35875

Abstract: current from a step-down transformer. The layer of admixtures on the surface of the electrode is then analyzed by ordinary methods of spectral analysis. The sensitivity of the method is quite high and reaches values of approximately $10^{-5}\%$ in the determination of the majority of volatile admixtures. The average squared error of a single determination is 10-20%. It depends on the element to be determined, on its concentration, and on the properties of the substance that is being analyzed. The analysis error can be reduced by rational choice of the internal standard. A discussion is made of the investigation of the fundamentals of the method of spectroscopic method and with the aid of radioactive tracers and of its application to the analysis of pure aluminum oxide.

Card 2/2

51-1-3/18

AUTHORS: Zaydel', A. N., Kaliteyevskiy, N. I., Lipis, L. V.
and Tarakanov, V. M.

TITLE: Spectral Analysis by the Evaporation Method. V. Analysis
of Plutonium by the Method of Evaporation in Vacuum.
(Spektral'nyy analiz po metodu ispareniya. V. Analiz plu-
toniya metodom ispareniya v vakuume)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.1, pp.16-20.
(USSR)

ABSTRACT: Refs. 1-3 describe spectral analysis using the evaporation
method. This method is applied here to plutonium which
presents particular difficulties because of its chemical
toxicity, -activity and absence of data on its physical
properties. A technique was developed using thorium,
lanthanum and uranium in place of plutonium. First the
general character of the spectrum was investigated. A
sample of plutonium was obtained by depositing a drop of
 PuCl_4 on a copper electrode. This drop was slowly evapora-
ted to form a layer of plutonium oxychloride. This elec-
trode was then placed in a chamber with four quartz windows
(Fig.1). This arrangement permitted recording of
spark and arc spectra by four

Card 1/3

51-1-3/18

Spectral Analysis by the Evaporation Method. V. Analysis of
Plutonium by the Method of Evaporation in Vacuum.

instruments simultaneously. The plutonium spectrum was excited in argon at 500 mm Hg. Using four spectrographs plutonium spectra in the region 2000-6500 Å were obtained (Fig.2). The spectra obtained indicated that determination of the amounts of Ca, Ti, W, Mo and Al in Pu was possible by combustion of Pu chloride deposits (sensitivity of 0.005-0.01%). Enrichment would be necessary for determination of many impurities. The authors found that PuO₂ was the best substance to use for spectral analysis provided it was not heated above 1800°C. At 1800°C about 0.001% of Pu evaporated in 1 minute. In the standards necessary for this type of analysis PuO₂ could be replaced by ThO₂. Using ThO₂ standards, Na, K, Li, Mn, Si, B, Co, Cd, Ag impurities in Pu could be determined quantitatively. The technique of preparation of these standards is described in Ref.1. PuO₂ was prepared by heating of Pu in a muffle furnace. The sensitivity and precision of determination of volatile impurities in PuO₂ is no lower than for similar analysis

Card 2/3

51-143/18

Spectral Analysis by the Evaporation Method. V. Analysis of
Plutonium by the Method of Evaporation in Vacuum.

of other metals (Th, U, Zr, Be). In some cases only
1-2 μ g of Pu were necessary. No numerical results of
Pu analysis are given in this paper. The authors thank
M. P. Chayka, G. I. Zhuravlev, T. G. Fedorov and
L. I. Averbakh who took part in some of this work.
There are 2 figures, 1 table and 9 references, 6 of which
are Slavic.

SUBMITTED: February 5, 1957.

AVAILABLE:

Card 3/3

11P15, L V

Spectroscopic analysis by the vaporization method. II. Determination of admixtures in uranium and cerium compounds by vaporization in vacuo. V. I. Vernadskii, L. I. Zaitseva, M. P. Zhukovskii, and L. I. Leningrad. *Zh. Fiz. Khim.* 1954, 28, 1532-1534. — Fifty-mg samples of ThO_2 were heated for 60 sec. at 1900° in vacuo. The vaporized impurities were collected on a Cu electrode and analyzed spectrographically by the 3 standards method. The sensitivity with which Li, Be, B, Na, K, Mn, Cr, Fe, Co, Ni, Cu, and Zn were thus detd. was 1×10^{-4} to $2 \times 10^{-6}\%$, depending on the element. B in Be was detd. by vaporizing a 30-mg. BeO sample at 1750 – 1800° for 60 sec. and spectrographically analyzing the driven-off impurities. B was detd. from the line $2490.78 \text{ \AA}$. In the analysis of B an internal standard, AuCl_3 , was used. IV. Determination of the degree of condensation of admixtures. Yu. I. Belyaev and A. N. Zaidel (V. I. Vernadskii Inst. Geochem. and Anal. Chem., Acad. Sci. U.S.S.R., Moscow). *Ibid.* 30-40; cf. C.A. 51, 7940i. —The effects of geometric factors, temp., duration of vaporization, concn. of sought and extraneous elements, wt. of sample, and other factors on the degree of condensation of admixts. were studied. The degree of condensation K is defined as the ratio of the no. of atoms of an element condensed on the capsule subsequently used as electrode to the no. of atoms of the same element present in the sample before vaporization. This study was carried out with non-volatile oxides of Be, Zr, La, Th, U, and Pu by using as admixt. radioactive Na^{24} , K^{42} , Th^{232} , Np^{237} , Ba^{137} , Zn^{65} , Cd^{115} , Sb^{125} , and Bi^{210} . The degree of condensation was detd. from $k = I/I_1$, where I is the activity of the condensate on the capsule after vaporization and I_1 is the activity

of the sample by (1) vaporizing the admixt. elements by (1) pptn. from solns., (2) soaking the solid basic component in solns. of admixt. elements, and (3) mech. mixing of basic component with solid oxides of admixt. elements. Vaporization was carried out at atm. pressure and in vacuo (10⁻³ mm.) at 800-2000°. At approx. 1800° K did not depend on the basic component. The wt. of the sample if it did not exceed 100 mg. had no effect on K. Once the required temp. was reached 2-2.5 min. sufficed to vaporize all the admixts. from a 50-mg. sample. Generally, the time required was less for vaporization in vacuo than at atm. pressure. The concn. of the admixts. in the sample did not affect K. The presence of extraneous elements, such as Ga and Ag (cf. Scribner and Mullin, C.A. 41, 1571) had no effect on K. The distance between the sample and the capsule (electrodes) did not affect K, however, too short or too long distances should be avoided, 1-2.5 cm. gave the best results. The method of prepg. the sample affected the temp. at which complete vaporization of admixts. was obtained, particularly when samples were prepd. by method (1). In this case, admixt. elements entered lattices of the basic component when the at. radii of the two were similar. In such cases complete vaporization was obtained at temps. at which $T_v/T_m = 0.55-0.6$, where T_v is the temp. of vaporization and T_m is the m.p. of the basic component. This ratio of temps. is analogous to Tammann's "Auflockerung" (cf. C.A. 17, 3434; 19, 2161; 20, 3474; 23, 747).

M. H. H. 2/2
11/10/60

Lipia, L. V. and Y. I. Korovin,

"IMPURITIES DETERMINATION IN ZIRCONIUM AND ITS COMPOUNDS BY THE SPECTRAL METHOD".

By Y. I. Korovin and L. V. Lipia.

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept. 1958.

78-3-4-23/38

AUTHORS: Alenchikova, I. F., Zaytseva, L. L., Lipis, L. V.,
Nikolayev, N. S., Fomin, V. V., Chebotarev, N. T.

TITLE: Investigation of the Physico-Chemical Properties of Plutonyl
Fluoride (Izucheniye fiziko-khimicheskikh svoystv ftoristogo
plutonila)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 951-955 (USSR)

ABSTRACT: The synthesis of plutonyl fluoride from hydrochloric acid
solutions of plutonium-VI with liquid hydrofluoric acid
was elaborated.
The plutonyl fluoride produced by this synthesis was ana-
lyzed as follows:
a) by chemical analysis
b) by determination of the state of valence of plutonium
by means of the electron absorption spectrum
c) by the determination of the composition based on the
U. R. -absorption spectrum
d) by X-ray structural analysis.

Card 1/2 The chemical analysis showed that plutonyl fluoride has the
following formula: PuO_2F_2 .

78-3-4-23/38

Investigation of the Physico-Chemical Properties of Plutonyl Fluoride

The electron and U.R. absorption spectra of plutonyl fluoride proved the presence of the PuO_2^{2+} -ion and the absence of the Pu-IV-ion.

The crystallization structure of plutonyl fluoride shows a rhombic lattice with the constants $a = 5,797 \pm 0,005 \text{ \AA}$ and $42^\circ \pm 3'$.

The X-ray density of PuO_2F_2 amounts to $6,50 \text{ g/cm}^3$. The solubility of plutonyl fluoride in water at 20°C amounts to $1,07 \text{ g/l}$. On the action of water on plutonyl fluoride a change of structure occurs. There are 5 figures, 2 tables, and 7 references.

SUBMITTED: October 20, 1957

Card 2/2

ZAYDEL', A.N.; KALITEYEVSKIY, N.I.; LIPIS, L.V.; CHAYKA, M.P.

Spectrum analysis of thorium and beryllium by the vacuum
evaporation method. Fiz.sbor. no.4:31-32 '58. (MIRA 12:5)

1. Fizicheskiy institut Leningradskogo ordena Lenina gosudar-
stvennogo universiteta imeni A.A.Zhdanova.

(Thorium--Spectra)

(Beryllium--Spectra)

65651

24.3430
5.2200(A)

SOV/81-59-21-73842

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 21, p 18 (USSR)

AUTHORS: Korovina, I.A., Lipis, L.V., Fomin, V.V.

TITLE: On the Ultraviolet Absorption Spectra¹¹ of Plutonium Compounds

PERIODICAL: Fiz. sb. L'vovsk. un-t, 1958, Nr 4(9), pp 175 - 180

ABSTRACT: The absorption spectra of Pu solutions in 2 n HClO₄ (in the presence of 0.3 n HCl) have been investigated in the near ultraviolet region. It has been found that in the spectra of Pu(3+) solutions the absorption maxima are located around 216 and 236 mμ, Pu(4+) around 213 mμ and Pu(6+) around 210 mμ. The absorption coefficient of these bands is 20 - 40 times higher than the absorption coefficient of Pu bands in the region of longer wavelengths; besides that, these bands are distinguished by a considerably larger half-width. Their location and intensity depend very strongly on the conditions of the outer medium. This peculiarity is used for determination of the constant of the reaction $\text{Pu}^{4+} + \text{HC}_2\text{O}_4^- \rightleftharpoons$

Card 1/2

✓

65851

On the Ultraviolet Absorption Spectra of Plutonium Compounds SOV/81-59-21-73842

$\rightleftharpoons \text{PuC}_2\text{O}_4^{2+} + \text{H}^+$, which was found to be equal to $(3.0 \pm 1.8) \cdot 10^5$. The bands considered are interpreted as 5f-6d transitions in distinction from Pu bands in the longwave region which pertain to 5f-5f transitions.

V. Aleksanyan

Card 2/2

SOV/51-5-3-18/21

AUTHORS: Koroivin, Ya.I. and Lipis, L.V.

TITLE: Use of a Hollow-Cathode Discharge for Determination of Impurities in ZrO_2 . I. (Ispol'zovaniye razryada v polom katode dlya opredeleniya primesey v ZrO_2 . I.)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 3, pp 334-337 (USSR)

ABSTRACT: Only a few papers have been published so far on the use of a hollow-cathode discharge in spectral analysis (Refs 1-4). The hollow-cathode discharge may be conveniently employed in analysis of refractory oxides. Zirconium dioxide (ZrO_2) was used as a typical refractory oxide. The usual hollow-cathode apparatus with helium carrier gas was used (Fig 1). The discharge tube was made of quartz and was water-cooled (Fig 2). A molybdenum glass stopper carried three graphite cathodes as shown in Fig 2. The cathode dimensions are given in Fig 3. The voltage across the discharge tube was supplied from 1000 V valve rectifier. Sensitivity of the method depends on the weight of the sample; the optimum weight is 30-50 mg for the cathode dimensions given in this paper. At currents from 200-1400 mA only the strongest Zr lines are present together with the impurity lines. In analysis for alkali elements 250-300 mA currents give the best results. For the

Card 1/2

SOV/51-5-3-18/21

Use of a Hollow-Cathode Discharge for Determination of Impurities in ZrO_2 . I.

Other elements given in the first column of the table on p 336 the optimum currents vary from 800-1200 mA. The second column of the table on p 336 gives the wavelength used in the analysis for a particular impurity; the third column gives the wavelengths of internal standards, the fourth gives the sensitivity of the method described in % and the fifth column gives the sensitivity obtainable by the evaporation method of Refs 5, 6. Figs 4, 5 and 6 give the typical calibration curves used in the analysis. The speed of the analysis is determined mainly by the rate of pumping out the discharge tube and the rest of the apparatus. One laboratory assistant can analyse 20-25 samples in one day. The comparatively long times of combustion of samples in the hollow-cathode discharge produce favourable conditions for photoelectric recording. There are 6 figures, 1 table and 9 references, 5 of which are Soviet.

SUBMITTED: September 6, 1957

Card 2/2

1. Chemical impurities--Determination 2. Zirconium oxide--
Spectrographic analysis 3. Discharge tubes--Applications
4. Discharge tubes--Performance

AUTHOR: Lipis, L.V.

32-24-6-22/44

TITLE: Spectral Analysis According to the Vaporization Method
(Spektral'nyy analiz po metodu ispareniya) Survey (Obzor)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp 736-745 (USSR)

ABSTRACT: Among other data the present paper contains the results hitherto obtained by the application of physical methods of separating admixtures from the basic component of the sample in the case of a spectral analysis. Chemical methods of concentration have already been employed by H. Rose and R. Böse (Ref 4) and Veselovskiy (Ref 5), whereas Preuss (Ref 6) heated the minerals in graphite vats. Also two electric arcs were used, as e.g., by Levintov (Ref 7), Shaw et al. (Ref 8), whereas Rouse (Ref 9) carried out a partial separation of the vaporization process and Keck (Ref 10) used high-frequency furnaces with quartz vats. A.K. Rusanov (Ref 13) carried out single analyses by fractionation vaporization, and so did Scribner and Mullin (Ref 14). The last-mentioned method is described more in detail, and for experiments carried out by vaporization in a vacuum comparative results are given in form of a table together with data concerning the application of various

Card 1/4

Spectral Analysis According to the Vaporization Method

32-24-6-22/44

spectrographs. In connection with direction concerning the selection of the best possible conditions for the vaporization of admixtures, separate data are given about various elements and their compounds (oxides) and of melting temperature; moreover, radioactive indicators are mentioned. Calibration curves and a table of the degree of condensation during evaporation are given together with some necessary comments. The methods of determination developed by Scribner and Mullin (Ref 14) and S.L. Mandel'shtam et al. (Ref 17) are also mentioned, and the excitation of the admixture spectra, concentrated in thin layers, is explained. When discussing the production of etalons, mention is made, among other things, of the fact that etalons should have a composition and concentration similar to those of the sample to be investigated. In the case of a complete vaporization of admixtures and condensation on the electrodes, concentration sensitivity of determination depends mainly on the absolute sensitivity of the spectroscopical determination of the admixture elements excited in one or the other light source; besides, it also depends on the weight of the sample itself. In the case of a low degree of volatility (as e.g. in beryllium) the degree of condensation also depends on temperature. The application of an inner standard offers some advantages; it is pointed out that so important an

Card 2/4

Spectral Analysis According to the Vaporization Method

32-24-6-22/44

element as e.g., boron can be determined in a concentration of only $1 \cdot 10^{-5}\%$ with a maximum error limit of 10-15%. In the course of analyses it was found that the principal fault is to be found in the non-productibility of the process of vaporization, which is particularly marked in the case of the determination of elements the degree of condensation of which is less than 100%. One of the most important sources of errors is found in the measuring and maintenance of the temperature of the sample. Thus, in the case of nickel, 12% of the total of 13% of errors committed in the course of determination is due to temperature measurement. In conclusion it is pointed out that the evaporation method is suited especially for pure substances, and that it may be used for both composed and simple spectra. The accuracy of determination in the method of vaporization of the basic substance and condensation of admixtures is lower than in the case of the usual method, but sensitivity increases up to $10^{-6} - 10^{-7}\%$. There are 1 figure, 7 tables, and 48 references, 21 of which are Soviet.

Card 3/4